Job Description – Research Assistant/Associate (dependent on experience)

Part Time (16.5 hours per week)
12 Month Fixed Term Contract
AC2
Walton Hall, Milton Keynes

The Role
The Research Assistant/Associate role is funded by
(https://www.gov.uk/government/organisations/innovate-uk)

The overall aim of this project is to develop novel technologies to aid accessibility to touch-led digital art and design tools for students with limited sight, registered at the Open University. This post is a flexible, fully funded Research Assistant position (1 year part-time or 6 months full time, time mix negotiable to fit the candidate). The post is to assist with research in the area of technologies to support blind and visually impaired makers and designers in the arts and cultural setting. The project is funded by Innovate UK R&D development, which encourages research in innovation and creativity within the UK.

The project is set around the designing of tools that help visually impaired designers and artists develop their own designs, simulating the use of pen on paper, and also communicating about such designs at a distance. The research aims to investigate how technologies that are based around haptic sensations (i.e. that are touch based) can provide enriching sensory experience for visually impaired designers and give them agency. The role for the RA is to support the planning and running of user studies, using a range of primarily qualitative research methodologies to evaluate prototype designs.

We are looking for someone who

- Has a Master or PhD in Design, Interaction Design, Human Computer Interaction, Physical Computing or related areas.
- Has experience in organizing and running user studies, using qualitative research methods and analysing qualitative data, but also with an understanding of quantitative data.
- Is sensitive to people’s diverse abilities and understands equal opportunities/accessibility issues.
- Has digital prototyping skills (e.g. Arduino or e-drawing, CAD) which would be advantageous.
- Excellent interpersonal and communication skills, both written and oral.
- Has permission to work in the United Kingdom at least for the duration of the project.

Key responsibilities

- To analyse the data and run data tests with data analysis tools
• To co-write papers for publication in high quality journals and conferences
• To manage a smooth collaboration with industrial partners and stakeholders

**Skills and Experience**

• PhD or working towards a PhD in a relevant area
• Evidence of high-quality research in a relevant area
• Able to draft technical reports and journal papers
• Excellent oral and written communication skills

**About the HAPPIE project**

Virtual and haptic technologies are currently being viewed as a user-friendly education tool which can add-value to students immersion in study. In this project we intend to develop an inclusive haptic virtual tool, which will be offered to aid sensory led immersion for undergraduates registered on a distance learning engineering and innovation programme. As part of the project, we plan to facilitate engineering and design undergraduates, with varying sight acuities, to access 3D renderings of virtual prototypes. The cross tactual communication is intended to engage users in a more innate exploratory procedures and increase tactile interactions at a distance when working with tutor or peer groups. Therefore, this enables a wider creative community to physically share tacit tactile interactions of drawings and sketches, increasing the sensory contact with tutor and peer groups.

**STEM**

**Faculty of Science, Technology, Engineering & Mathematics**

The Faculty of Science, Technology, Engineering and Mathematics (STEM) is comprised:

• School of Computing & Communications
• School of Environment, Earth & Ecosystem Sciences
• School of Engineering & Innovation
• School of Life, Health & Chemical Sciences
• School of Mathematics & Statistics
• School of Physical Sciences
• Knowledge Media Institute
• Deanery including teams supporting Curriculum, Research and Enterprise, Laboratory Infrastructure and Faculty Administration

“We aspire to be world leaders in inclusive, innovative and high impact STEM teaching and research, equipping learners, employers and society with the capabilities to meet tomorrow’s challenges”

The Faculty of STEM consists of 2500 staff including 1,800 Associate Lecturers. The Faculty delivers over 185 modules across undergraduate and postgraduate curriculum, supporting nearly 19,000 students (full time equivalents) which is 29% of the OU total.

The Faculty generates more research income (circa £17M) than any other Faculty in the University, supported by a comprehensive laboratory infrastructure.
We are proud of our distinctive values and capabilities underpinning our aspiration:

We are inclusive:
- We transform people’s lives, ensuring STEM education is openly accessible to many thousands of students from diverse backgrounds – our students express high satisfaction with their study experience.
- We engage the public in exciting citizen science and engineering, including through free open educational resources, multi-platform broadcasting, outreach to inspire the next generation and with programmes to encourage more women into STEM.

We are highly innovative:
- We are at the forefront of innovative developments in teaching practical science and engineering at a distance, through simulated and remote access laboratories and practical experimentation.
- Our high-quality teaching and curriculum are informed by world-leading research, strong links with professional bodies and communities of practitioners, as well as by scholarship focused on continuously improving our STEM pedagogy.

We deliver significant social and economic impact:
- We provide STEM higher education at a scale and reach unsurpassed in the UK, with a sizeable international reach and further growth potential.
- We inject transferable STEM skills and knowledge direct into the workplace for immediate employee and employer benefit, as students combine study while working.
- The employability value of our courses is underpinned by accreditation from leading STEM Professional Bodies and Learned Societies, as well as partnerships and sponsorship with leading employers.
- Our high quality, applied and academically relevant teaching and research addresses real-world issues, delivering impact for industry and society, including addressing pressing STEM skill-shortages across the UK.